

What is claimed is:

- 1 1. An object model architecture for providing network management of a
2 telecommunications network, said architecture comprising:
3 a base framework interface object;
4 a base framework container interface object;
5 a base framework object container interface and a base framework action
6 container interface each being inherited from said base framework container interface;
7 a base framework network entity interface inherited from said base framework
8 object container interface; and
9 a base framework action interface inherited from said base framework action
10 container interface, said base framework interface, said base framework container
11 interface, said base framework object container interface, said base framework action
12 container interface and said base framework action interface being implemented by
13 corresponding implementation abstract objects and said base framework network entity
14 interface being implemented by a base framework network entity implementation class
15 object.
- 1 2. The architecture of Claim 1, wherein said base framework network entity
2 interface object and said base framework network entity implementation object each
3 inherit corresponding communication connection class objects.
- 1 3. The architecture of Claim 1, wherein said base framework action interface
2 and said base framework action implementation abstract object each inherit
3 corresponding action classes.
- 1 4. The architecture of Claim 1, wherein said network entity interface inherits
2 a base framework attribute container interface.
- 1 5. The architecture of Claim 2 wherein said connection classes are circuit
2 classes.
- 1 6. The architecture of Claim 2, wherein said connection classes are logical
2 port classes.

7. The architecture of Claim 5 wherein said circuit classes include CircuitGenericEntityIfc, CircuitAxAtmIfc, CircuitAxCeIfc, CircuitAxFrameIfc, CircuitCoreAtmIfc, CircuitCoreCeIfc, CircuitCoreFrameIfc which represent interface objects for different types of sample Circuit objects and CircuitGenericEntityImpl, CircuitAxAtmImpl, CircuitAxCeImpl, CircuitAxFrameImpl, CircuitCoreAtmImpl, CircuitCoreCeImpl, CircuitCoreFrameImpl classes represent implementations of the respective Circuit interface objects.

8. The architecture of Claim 5 wherein said circuit classes are selected from the group consisting of CircuitGenericEntityIfc, CircuitAxAtmIfc, CircuitAxCeIfc, CircuitAxFrameIfc, CircuitCoreAtmIfc, CircuitCoreCeIfc, and CircuitCoreFrameIfc which represent interface objects of different types of Circuit objects.

9. The architecture of Claim 6 wherein said logical port classes include LPortGenericEntityIfc, LPortGeneralIfc, LPortEthernetIfc, LPortILMIIIfc, LPortNodeToNodeIfc, LPortPNNIIIfc, LportTrunkIfc which represent interface objects for the different types of sample Logical Port objects and LPortGenericEntityImpl, LPortGeneralImpl, LPortEthernetImpl, LPortILMIIImpl, LPortNodeToNodeImpl, LPortPNNIIImpl, LPortTrunkImpl classes represent implementations of the respective Logical Port interface objects.

10. The architecture of Claim 6 wherein said logical port classes are selected from the group consisting of LPortGenericEntityIfc, LPortGeneralIfc, LPortEthernetIfc, LPortILMIIIfc, LPortNodeToNodeIfc, LPortPNNIIIfc, LportTrunkIfc which represent interfaces objects of different types of Logical Port objects.

11. The architecture of Claim 5 wherein said action classes include a BFWGetOperationalInfoActionIfc, a BFWGetPeriodicStatisticsActionIfc, a BFWGetStatisticsActionIfc, a BFWStopStatisticsActionIfc, a BFWAddActionIfc, a BFWDeleteActionIfc, a BFWGetActionIfc, a BFWListObjectByParentActionIfc, and a BFWListObjectByTypeActionIfc interface object.

12. The architecture of Claim 5 wherein said action classes are selected from the group consisting of BFWGetOperationalInfoActionIfc, a

3 BFWGetPeriodicStatisticsActionIfc, a BFWGetStatisticsActionIfc, a
 4 BFWStopStatisticsActionIfc, a BFWAddActionIfc, a BFWDeleteActionIfc, a
 5 BFWGetActionIfc, a BFWListObjectByParentActionIfc, and a
 6 BFWListObjectByTypeActionIfc interface object.

7 13. The architecture of Claim 6 wherein said action classes are selected from
 8 the group consisting of BFWGetOperationalInfoActionIfc, a
 9 BFWGetPeriodicStatisticsActionIfc, a BFWGetStatisticsActionIfc, a
 10 BFWStopStatisticsActionIfc, a BFWAddActionIfc, a BFWDeleteActionIfc, a
 11 BFWGetActionIfc, a BFWListObjectByParentActionIfc, and a
 12 BFWListObjectByTypeActionIfc interface object.

1 14. A computer readable medium including an object model architecture in
 2 software for providing network management of a telecommunications network, said
 3 architecture comprising:

4 a base framework interface object;
 5 a base framework container interface object;
 6 a base framework object container interface and a base framework action
 7 container interface each being inherited from said base framework container interface;
 8 a base framework network entity interface inherited from said base framework
 9 object container interface; and

10 a base framework action interface inherited from said base framework action
 11 container interface, said base framework interface, said base framework container
 12 interface, said base framework object container interface, said base framework action
 13 container interface and said base framework action interface being implemented by
 14 corresponding implementation abstract objects and said base framework network entity
 15 interface being implemented by a base framework network entity implementation class
 16 object;

17 wherein said base framework network entity interface object and said base
 18 framework network entity implementation object each inherit corresponding
 19 communication connection class objects and wherein said base framework action

20 interface and said base framework action implementation abstract object each inherit
21 corresponding action classes.

1 15. The architecture of Claim 14, wherein said network entity interface
2 inherits a base framework attribute container interface.

1 16. The architecture of Claim 14 wherein said connection classes are circuit
2 classes.

1 17. The architecture of Claim 14, wherein said connection classes are logical
2 port classes.

1 18. The architecture of Claim 16 wherein said circuit classes are selected from
2 the group consisting of CircuitGenericEntityIfc, CircuitAxAtmIfc, CircuitAxCeIfc,
3 CircuitAxFrameIfc, CircuitCoreAtmIfc, CircuitCoreCeIfc, CircuitCoreFrameIfc which
4 represent interface objects for different types of sample Circuit objects and
5 CircuitGenericEntityImpl, CircuitAxAtmImpl, CircuitAxCeImpl, CircuitAxFrameImpl,
6 CircuitCoreAtmImpl, CircuitCoreCeImpl, CircuitCoreFrameImpl classes represent
7 implementations of the respective Circuit interface objects.

1 19. The architecture of Claim 16, wherein said logical port classes include
2 LPortGenericEntityIfc, LPortGeneralIfc, LPortEthernetIfc, LPortILMIIfc,
3 LPortNodeToNodeIfc, LPortPNNIIfc, LportTrunkIfc which represent interface objects
4 for the different types of sample Logical Port objects and LPortGenericEntityImpl,
5 LPortGeneralImpl, LPortEthernetImpl, LPortILMIImpl, LPortNodeToNodeImpl,
6 LPortPNNIImpl, LPortTrunkImpl classes represent implementations of the respective
7 Logical Port interface objects.

1 20. The architecture of Claim 14 wherein said action classes are selected from
2 the group consisting of BFWGetOperationalInfoActionIfc, a
3 BFWGetPeriodicStatisticsActionIfc, a BFWGetStatisticsActionIfc, a
4 BFWStopStatisticsActionIfc, a BFWAddActionIfc, a BFWDeleteActionIfc, a
5 BFWGetActionIfc, a BFWListObjectByParentActionIfc, and a
6 BFWListObjectByTypeActionIfc interface object.